

Claims

1. A one part receptacle for a fastener for insertion, in use, into a hole in a receiving component, the receptacle comprising a base with legs, at least one of the legs retaining the receptacle on a component in use, wherein the base includes a hole for engaging, in use, with the fastener, and at least one leg is shaped to form a compliant mechanism which provides a compliant retaining force in the direction of insertion of the fastener, whereby, in use, the receptacle is inserted into the hole and retained thereon and provides compliance between the component on which it is retained and a second component attached thereto via the receptacle and fastener.
2. The receptacle according to claim 1, wherein two legs on opposite sides of the base are shaped to form the compliant mechanism to provide the compliance in the direction of insertion of the fastener.
3. The receptacle according to any preceding claim, wherein the at least one leg shaped to form the compliant mechanism comprises at least one outer leg and an inner leg.
4. The receptacle according to claim 3, wherein the end portion of one of the at least one outer leg and the inner spring leg is bent to form a wing extending laterally from the base to provide compliance to the receptacle in its insertion direction.
5. The receptacle according to any of claims 3 or 4, wherein the at least one leg shaped to be the compliant mechanism comprises two outer legs.
6. The receptacle according to claim 5, wherein the end portions of the two outer legs are joined.
7. The receptacle according to any of claims 3 to 6, wherein the inner leg is positioned at an acute angle to the at least one outer leg.
8. The receptacle according to claim 7, wherein the inner leg is positioned at an angle in the range 12-15 ° to the at least one outer leg.
9. The receptacle according to claim 4, wherein the end portion of one of the inner leg and at least one outer leg is bent back on itself to form a wing

extending from the base such that, in use, the inner leg is positioned at an acute angle to the end portion of the outer leg to provide compliance to the receptacle in its insertion direction.

10. The receptacle according to any of claims 5 to 9, wherein the inner leg is located centrally between the two outer legs.

11. The receptacle according to any of claims 4 to 10, wherein the end portion of the at least one outer leg is, in use, positioned at an acute angle to the upper surface of the receiving component.

12. The receptacle according to claim 11, wherein the at least one outer leg is, in use, positioned at an angle of about 30° to a surface of the receiving component.

13. The receptacle according to any preceding claim, formed from metal.

14. The receptacle according to claim 13, formed from carbon steel.

15. A fastener and receptacle combination comprising a receptacle according to any preceding claim which is installed, in use, into a hole in a component and a fastener which is engaged with the hole in the base of the receptacle.

16. The fastener and receptacle combination according to claim 15, wherein the fastener is a quarter turn fastener.

17. The fastener and receptacle combination according to any of claims 15 or 16, wherein a panel is pre-mounted to the receptacle prior to installation in to the receiving component.